UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,865	12/16/2003	William S. DiPoala	BSS0007	5392

832	7590	10/18/2005	

BAKER & DANIELS LLP
111 E. WAYNE STREET
SUITE 800
FORT WAYNE, IN 46802

EXAMINER
POLYZOS, FAYE S

ART UNIT	PAPER NUMBER
2878	

DATE MAILED: 10/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/736,865	DIPOALA, WILLIAM S.
	Examiner	**Art Unit**	
	Faye Polyzos	2878	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-38* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *21-27,29,31-33 and 35* is/are allowed.

6)☒ Claim(s) *1-3,9-16,28,30,34 and 36-38* is/are rejected.

7)☒ Claim(s) *4-8,17-20* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date *3/04, 5/05*.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____ .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2.   Claims 1-3, 12-16, 28, 30, 34, 36-38 are rejected under 35 U.S.C. 102(b) as

being anticipated by *Rechsteiner et al (US 6,246,321 B1)*.

Regarding claim 1, Rechsteiner discloses a motion detector system (1)

comprising a first sensor (3) sensitive to light in a first range of wavelengths in at least

one detection zone and generating a first output signal representative of the detected

level of light in the first range; a second sensor (2) sensitive to light in a second range of

wavelengths differing from the first range and generating a second output signal

representative of the detected level of light in the second range, and second sensor

being positioned proximate the first sensor (See Generally Fig. 1 and col. 3, lines 29-

48); and a processor (6) programmed to generate an alarm signal based upon the first

and second output signals wherein the alarm signal is generated when first and second

conditions are satisfied, the first condition being satisfied when the first output signal

indicates motion has occurred in the at least one detection zone and the second

condition being satisfied when the second output signal does not correlate to the first

output signal (See Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21).

Regarding claim 2, *Rechsteiner* discloses a motion detection system wherein the first output signal is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36).

Regarding claim 3, Rechsteiner discloses a motion detection system wherein the first output signal is compared to a first threshold value and the second output signal is compared to a second threshold value and both the first output signal must exceed the first threshold value and the second output signal must exceed the second threshold value when the second condition is not satisfied (col. 5, lines 2-21).

Regarding claim 12, Rechsteiner discloses the first sensor is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second range of wavelengths has an upper limit less than 7 μm and includes wavelengths greater than 400 nm (col. 3, lines 31-36).

Regarding claim 13, Rechsteiner discloses the first sensor is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second sensor (2) is sensitive to at least a portion of visible light having wavelengths between 400 nm and 700 nm (col. 3, lines 31-36).

Regarding claim 14, Rechsteiner discloses the first sensor is a pyro-electric sensor (thermal imaging sensor) (3) and the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second sensor (2)

is sensitive to near infrared light having a wavelength of approximately 1μm (col. 3, lines 31-36).

Regarding claim 15, Rechsteiner discloses a method of detecting motion, comprising: detecting motion in at least one detection zone by sensing at a first position, infrared light emitted from the at least one detection zone; sensing visible light proximate the first position; generating a motion detection signal when both a) motion is detected in the at least one detection zone by sensing infrared light emitted from the at least one detection zone and b) the detection of motion is based upon a change in the sensed infrared light that does not correlate to a change in the sensed visible light (col. 54-67 and col. 5, lines 1-15).

Regarding claim 16, *Rechsteiner* discloses the step of detecting motion comprises sensing light that includes infrared light having a wavelength within a range of approximately 7 to 14 μm (col. 3, lines 35-36).

Regarding claim 28, *Rechsteiner* discloses a method of detecting motion comprising: using a first sensor (3) to detect a change in light level within a first range of wavelengths indicative of one or the motion and a source of a potential false alarm; using a second sensor to detect a change in light level within a second range of wavelengths indicative of the source of a potential false alarm; and issuing a signal indicative of the motion only if the first sensor detects the change in light level within the first range of wavelengths and the second sensor fails to detect a corresponding change in light level within the second range of wavelengths (See Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21).

Regarding claim 30, Rechsteiner discloses a method wherein the first range of wavelengths includes light having wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second range of wavelengths has an upper limit less than 7 μm and includes wavelengths greater than 400 nm (col. 3, lines 31-36).

Regarding claim 34, Rechsteiner discloses a method of detecting motion, comprising: using a first sensor (3) to detect a change in light level within a first range of wavelengths indicative of one of the motion and a source of a potential false alarm; generating as signal indicative of motion if the first sensor detects the change of light within the first range of wavelengths; using a second sensor (2) to detect a change in light level within a second range of wavelengths indicative of the source of a potential false alarm; and suppressing all signals indicative of the motion generated by the first sensor for a predefined time period when the second sensor detects the change in light level within the second range of wavelengths (See Generally Fig. 2 and col. 4, lines 63-67 and col. 5, lines 1-40).

Regarding claim 36, Rechsteiner discloses a method wherein the first range of wavelengths includes wavelengths of approximately 7 to 14 μm (col. 3, lines 35-36) and a second range of wavelengths has an upper limit less than 7 μm and includes light having a wavelength of greater than 400 nm (col. 3, lines 31-36).

Regarding claim 37, Rechsteiner discloses a motion detection system comprising: a first sensor sensitive to light in a first range of wavelengths (3); a second sensor (2) sensitive to light in a second range of wavelengths; a processor in communication with each of the first and second sensors and configured to generate an

alarm signal based upon signals received from each of the first and second sensors;

and a light emitting device (9) in communication with the processor, the light emitting

device disposed in an externally visible portion on the system and wherein the second

sensor is sensitive to visible light and the processor is configured to adjust a brightness

of the light emitting device in response to changes in ambient visible light levels (See

Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21, 47-65).

Regarding claim 38, Rechsteiner discloses the light emitting device is a light

emitting diode, the first range of wavelengths includes wavelengths of approximately 7

to 14 μm (col. 3, lines 35-36) and the second sensor (2) is sensitive to at least a portion

of visible light having wavelengths between 400 nm and 700 nm (col. 3, lines 31-36).

Claim Rejections - 35 USC § 103

3.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4.   Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rechsteiner et al (US 6,246,321 B1) as applied to claim 1 above, and further in view of

Shpater et al (US 6,215,399 B1).

Regarding claims 9-10, Rechsteiner discloses the motion detection system may

comprise simple image-processing algorithms such as filter, illumination controls and

the like (col. 3, lines 64-67). Rechsteiner does not specifically disclose of a filtering

element disposed between the first sensor and at least one detection zone. Shpater

discloses a filter element (i.e. fresnel type lens) disposed between the first sensor and

the at least one detection zone wherein the filter inhibits the passage of light having

predetermined wavelengths (See Generally Figs. 1-2 and col. 3, lines 35-44). Shpater

teaches when a dual PIR motion detector in which the sensors and lenses are vertically

aligned, have a simultaneous response, the response from the two detectors is not

Simultaneous and an alarm signal is not generated, and thus false alarms are avoided.

A "simultaneous" response requires accurate alignment of the two sensors and lenses,

which can be provided by mounting the lenses and sensors in the same housing.

Preferably, the lenses are formed on the same fresnel lens sheet to avoid any minor

misalignment between the two lenses (col. 2, lines 35-44). Therefore, it would have

been obvious to modify the motion detection system disclosed by Rechsteiner, to

include a filtering element such as a fresnel lens, as disclosed supra by Shpater, to

allow for a more versatile apparatus.

Regarding claim 11, Shpater discloses of a motion detection system comprising

a plurality of detection zones (12) (col. 3, lines 39-41).

Allowable Subject Matter

5.   Claims 21-27, 29, 31-33 and 35 are allowed.

6.   The following is a statement of reasons for the indication of allowable subject

matter:

Regarding independent claim 21, the prior art does not disclose or fairly suggest

a dual sensor motion detection system comprising: a first sensor capable of detecting

light in both an infrared frequency range and a first visible frequency range and a

second sensor capable of detecting light in a second visible frequency range. The

examiner notes that while it is known in the art (see for example *Rechsteiner et al -- US

6,246,321 B1--* See Abstract and Fig. 1 and col. 4, lines 42-67 and col. 5, lines 1-21) for

a dual sensor motion detection system to comprise a first sensor capable of detecting

light in both an infrared frequency rang and a visible frequency range, the prior art does

not suggest the second sensor also being capable of detecting visible light in a second

visible frequency range.

The remaining claims 22-27, 29, 31-33 and 35 are allowable on the basis of their

dependency.

Claims 4-8 and 17-20 objected to as being dependent upon a rejected base

claim, but would be allowable if rewritten in independent form including all of the

limitations of the base claim and any intervening claims.

Regarding claims 4, 17 and 19, the prior art, does not disclose or fairly suggest a

motion detection system or method wherein the second condition is not satisfied only

when the first output signal exceeds the first threshold value beginning at a first time

and the second output signal exceeds the second threshold value beginning at a

second time and the first and second times are separated by no more than a

predetermined time delay value.

Regarding claim 5, the prior art, does not disclose or fairly suggest a motion

detection system wherein the second condition is not satisfied only when both first

output signal exceeds one of the first threshold values and the second output signal

exceeds one of the second threshold values and the first output signal exceeds the one first threshold value beginning at a first time and the second output signal exceeds the one second threshold value beginning at a second time and the first and second times are separated by no more than a predetermined time delay value.

Regarding claim 6, the prior art, does not disclose or fairly suggest a motion detection system wherein one first threshold value and the second threshold value are either both high threshold values or both low threshold values.

Regarding claim 7, the prior art, does not disclose or fairly suggest a motion detection system wherein the threshold comparators are all voltage comparators.

Regarding claims 8 and 18, the prior art, does not disclose or fairly suggest a motion detection system wherein the predetermined time delay value is greater than approximately 60 milliseconds.

Regarding claim 20, the prior art, does not disclose or fairly suggest a motion detection system comprising wherein a cadmium-sulfide photocell is used to sense visible light proximate the first position.
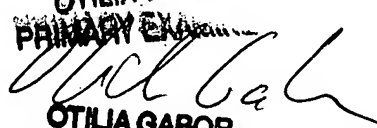
Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faye Polyzos whose telephone number is 571-272-2447. The examiner can normally be reached on Monday thru Friday from 7:30 AM to 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Porta can be reached on 571-272-2444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9.   Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

FP

OTILIA GABOR
PRIMARY EXAMINER

OTILIA GABOR
PRIMARY EXAMINER